AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for diagnosing an oral cancer in a patient, comprising:

a) obtaining a biological sample from a patient;

b) determining the expression level of a plurality of genes associated with an oral cancer in the biological sample, thereby producing a test expression profile, wherein the plurality of genes ~~are at least 40 genes selected from SEQ ID NOs: 1-43~~ have GenBank Accession Nos. X76029, U34252, U47011, M34309, U58970, D42047, M69177, X02419, X78932, Z78289, U46689, Y09616, M57731, M14200, U07969, M74558, S45630, Z29083, U56814, X15183, U59919, M19961, HG3549-HT3751, U18934, X87241, J04469, M11147, U19345, L14848, D13643, U06643, X98085, M28825, M61855, U24577, HG2992-HT5186, Z78285, D79994, L19593, M30818, U67963, U11877, X07695, D43968, and X12451; and

c) comparing the test expression profile with at least one signature expression profile from a patient known to have an oral cancer, wherein said signature expression profile consists of said plurality of genes and is indicative of an oral cancer,

wherein if the test expression profile substantially matches said signature expression profile, the patient has the oral cancer.

2. (Withdrawn) The method of claim 1, wherein the expression level is protein expression level.

3. (Withdrawn) The method of claim 2, wherein proteins are isolated from the biological sample before their expression levels are determined.

4. (Withdrawn) The method of claim 2 or 3, wherein the protein level is determined by a method selected from: immunoassay, protein array and single molecule detection.

5. (Original) The method of claim 1, wherein the expression level is mRNA expression level.

6. (Currently amended) The method of claim 5, wherein ~~nucleic acids~~ the mRNAs are isolated from the biological sample before their expression levels are determined.

7-9. (Cancelled)

10. (Original) The method of claim 1, wherein the biological sample is selected from: saliva, tissue, bone marrow aspirates, bone marrow biopsies, lymph node aspirates, lymph node biopsies, serum, and fine needle aspirates.

11. (Cancelled)

12. (Withdrawn) A method of allowing a dentist to provide for detection of oral disease at the point of patient care, comprising:

a. obtaining a biological sample from a dental patient at the point of care;
b. determining the expression level of a plurality of genes associated with an oral disease in the biological sample, thereby producing a test expression profile;
c. comparing the test expression profile with at least one signature expression profile of the plurality of genes indicative of an oral disease; and
d. notifying the patient the results of the test.

13. (Withdrawn) The method of claim 12, wherein the expression level is protein expression level.

14. (Withdrawn) The method of claim 13, wherein proteins are isolated from the biological sample before their expression levels are determined.

15. (Withdrawn) The method of claim 14, wherein the expression level is mRNA expression level.

16. (Withdrawn) The method of claim 15, wherein nucleic acids are isolated from the biological sample before their expression levels are determined.

17. (Withdrawn) The method of claim 15 or 16, wherein the mRNA level is determined by a method selected from: microarray analysis, multiplex PCR analysis and single molecule detection.

18. (Withdrawn) The method of claim 12, wherein the oral disease is oral cancer and the plurality of genes are 45 genes of which a signature expression profile is indicative of oral cancer.

19. (Withdrawn) The method of claim 12, wherein the oral disease is oral cancer and the plurality of genes are a subset of the 45 genes of which a signature expression profile is indicative of oral cancer.

20. (Withdrawn) The method of claim 12, wherein the sample is selected from: saliva, tissue, bone marrow aspirates, bone marrow biopsies, lymph node aspirates, lymph node biopsies, serum, and fine needle aspirates.

21. (Withdrawn) The method of claim 12, wherein the oral disease includes oral cancer, HIV, tooth decay, gingivitis, pyorrhea, and periodontitis.

22. (Withdrawn) The method of claim 12, wherein comparing determined expression levels includes allowing the dentist to select from among a plurality of groups of known oral diseases.

23. (Withdrawn) The method of claim 12, further including obtaining authorization representative of insurance coverage.

24. (Withdrawn) The method of claim 23, further comprising selecting a test for an oral disease as a function of insurance coverage.

25. (Withdrawn) The method of claim 24, further comprising requesting insurance reimbursement for the test.

26. (Withdrawn) The method of claim 25, further comprising generating a medical record representative of the test and result.

27. (Withdrawn) A system for allowing a dentist to test for an oral disease at the point of care, comprising:

a. a sample collection device for collecting a sample from a dental patient at the point of care;

b. a diagnostic system for generating a test expression profile by determining the expression level of a plurality of genes associated with an oral disease in the sample, and comparing the test expression profile with at least one signature expression signatures profile representative of an oral disease; and

c. a notification system for notifying the patient the results of the test.

28. (Withdrawn) The system of claim 27, wherein the diagnostic system comprises a micro-fluidic processing system for determining the expression level of a plurality of genes associated with an oral disease in the sample.

29-37. (Canceled)